

R E M A R K S

The Examiner rejected Claims 20 and its dependent claims under 35 USC §112, first paragraph. The Examiner asserted that the claims contained subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the Examiner cited the elements of Claim 20 reciting performing fitting procedures. Applicants respectfully traverse the Examiner's objection. In support of the claim elements directed to fitting procedures, Applicants direct the Examiner's attention to page 27, line 7 through page 28, line 19. In particular, page 27, lines 7 through 13 discuss the use of a least squares approach to account for errors in the definitions of the datasets. Least-squares algorithms are well known in the art, and are fitting procedures which calculates the best fit parameters of an approximating function, whose graph therefore matches the data in a dataset as well as possible. See, e.g., Phys 251 - Introduction to Computer Techniques in Physics, Least Squares, by J.C. Evans, Physics and Astronomy Department, George Mason University Latest Modification: November 14, 2001, at

<<http://www.physics.gmu.edu/~jevans/phys251/Topics/NumAnalysis/Approximation/leastSquares.html>> (“Suppose now we wish to construct approximating functions whose graphs need not necessarily contain the points of given discrete function, but which ‘**fits the function closely.**’ Such is the method known as least squares.” (emphasis added)). “[S]kill in the art can be relied upon to supplement that which is disclosed as well as to interpret what is written.” Rengo Co. Ltd. v. Molins Mach. Co., Inc., 657 F.2d 535, 549 (C.A.N.J. 1981) (citing In Re Bode, 550 F.2d 256 (C.C.P.A. 1977)). Therefore, Applicants assert that the language of Claims 31 to 33 are enabled by the specification.

The Examiner rejected Claim 20 and its dependent claims under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner asserted that the term “sets” in the preamble of Claim 20 was not clear, and that the terms “dynamic data” and “static data” in claims 21 and 22, respectively, was not clear. Applicants have amended Claims 20, 21, and 22 to clarify the claims.

The Examiner rejected Claims 20-23 and 25-29 under 35 USC §101 because the claimed invention was directed to non-statutory subject matter. Applicants respectfully traverse the Examiner's rejection. However, in an attempt to expedite allowance of the pending claims,

Applicants have amended Claims 20 and 25 to be more consistent with the sample statutory claims in EXAMINATION GUIDELINES FOR COMPUTER-RELATED INVENTIONS IV.B.2(b)(ii).

The Examiner further rejected independent Claims 20 and 25, as well as the claims depending therefrom, under 35 USC §103(a) as being unpatentable over U.S. Patent No. 6,216,129B1, to Eldering, in view of U.S. Patent No. 6,463,585 to Hendricks, et al. Applicants respectfully traverse the Examiner's rejection. In making the rejection, the Examiner first asserts that Eldering teaches expressing an assumed relationship between static and dynamic datasets as a mathematical assumption, and the Examiner cites column 8, lines 42-53, and column 9, lines 26-38, in support of this assertion. Applicants assert that the cited sections of Eldering do not teach expressing an assumed relationship between static and dynamic datasets as a mathematical assumption. Eldering teaches creating vectors, or graphs, of data representing individual consumer characteristics and advertisement characteristics, as illustrated in Figure 2A-C and 3A-B. See, e.g., Column 9, line 26-29, "In a preferred embodiment the consumer characterization vectors shown in FIGS. 2A-C and the ad characterization vectors represented in FIGS 2A and 3B have a standardized format, in which each demographic characteristic and product preference is identified by an indexed position." The cited sections of Eldering do not teach or suggest assuming a relationship between static and dynamic datasets, nor does Eldering teach or suggest expressing the assumed relationship as a mathematical assumption. Because Eldering does not teach or suggest expressing an assumed relationship between static and dynamic datasets as a mathematical assumption, and because the Examiner does not assert that the Hendricks reference teaches expressing an assumed relationship as a mathematical assumption, Applicants assert that there is at least one element of Applicants' claimed invention which is not taught or suggested by either reference. It is well established that, in order to show obviousness, all limitations must be taught or suggested by the prior art. In Re Boyka, 180 U.S.P.Q. 580, 490 F.2d 981 (CCPA 1974); MPEP § 2143.03. It is error to ignore specific limitations distinguishing over the references. In Re Boe, 184 U.S.P.Q. 38, 505 F.2d 1297 (CCPA 1974); In Re Saether, 181 U.S.P.Q. 36, 492 F.2d 849 (CCPA 1974); In Re Glass, 176 U.S.P.Q. 489, 472 F.2d 1388 (CCPA 1973). Applicants assert that the pending claims are patentable because at least one limitation therein is not taught or suggested by the references cited.

In rejecting Claims 20 and 25 over Eldering in light of Hendricks, the Examiner further asserts that Hendricks discloses defining an error function which describes the two datasets in terms of said mathematical assumption, and cites column 11, lines 44-50, and column 36, lines 56-64, in support of this assertion. Column 11, lines 44-50 teaches that other marketing information such as the demographics of viewers during certain time periods may be received by the Hendricks system. Column 36, lines 56-64 teaches an "...algorithm...that assigns targeted advertisements to the program and feeder channels... The algorithm spreads the available feeder channels among several programs." The cited portions of Hendricks teach the use of pre-defined algorithms to analyze program watched information and marketing data, with the results of such analysis provided to processing and editing routines that assign targeted advertisements to program and feeder channels. Hendricks clearly does not teach or suggest defining an error function which describes two datasets in terms of a mathematical assumption, as recited in Applicants' Claims 20 and 25. Because Applicants have shown that Hendricks does not teach or suggest expressing an assumed relationship as a mathematical assumption, and because the Examiner admits that the Eldering reference does not teach defining an error function which describes two datasets in terms of a mathematical assumption (see Office Action dated March 12, 2003, Page 7, first full paragraph), Applicants assert that there is at least one element of Applicants' claimed invention which is not taught or suggested by either reference. It is well established that, in order to show obviousness, all limitations must be taught or suggested by the prior art. In Re Boyka, 180 U.S.P.Q. 580, 490 F.2d 981 (CCPA 1974); MPEP § 2143.03. It is error to ignore specific limitations distinguishing over the references. In Re Boe, 184 U.S.P.Q. 38, 505 F.2d 1297 (CCPA 1974); In Re Saether, 181 U.S.P.Q. 36, 492 F.2d 849 (CCPA 1974); In Re Glass, 176 U.S.P.Q. 489, 472 F.2d 1388 (CCPA 1973). Applicants assert that the pending independent claims are patentable because at least one limitation therein is not taught by the references cited.

In rejecting Claims 20 and 25 over Eldering in light of Hendricks, the examiner asserts that Hendricks teaches performing fitting procedures to account for errors in an assumed relationship, and cites column 42, lines 29-62 in support of this assertion. Applicants respectfully traverse the Examiner's assertions. As described above, fitting procedures can be used to reduce the magnitude of errors and the impact of bias on a mathematical model. Rather than discussing the use of fitting procedures, the portions of the Hendricks reference cited by the Examiner simply describe a user interface to the Hendricks invention. Hendricks clearly does

not teach or suggest performing fitting procedures to account for errors in the definition of common subsets, as recited in Applicants' Claims 20 and 25. Because Applicants have shown that Hendricks does not teach or suggest performing fitting procedures to account for errors in the definition of common subsets, and because the Examiner admits that Eldering does not teach performing such fitting procedures (see Office Action dated March 12, 2003, Page 7, first full paragraph), Applicants assert that at least one element of Applicants' claimed invention is not taught or suggested by the Eldering and Hendricks references. It is well established that, in order to show obviousness, all limitations must be taught or suggested by the prior art. In Re Boyka, 180 U.S.P.Q. 580, 490 F.2d 981 (CCPA 1974); MPEP § 2143.03. It is error to ignore specific limitations distinguishing over the references. In Re Boe, 184 U.S.P.Q. 38, 505 F.2d 1297 (CCPA 1974); In Re Saether, 181 U.S.P.Q. 36, 492 F.2d 849 (CCPA 1974); In Re Glass, 176 U.S.P.Q. 489, 472 F.2d 1388 (CCPA 1973). Applicants assert that the pending independent claims are patentable because at least one limitation therein is not taught by the references cited.

In rejecting Claim 20 over Eldering in light of Hendricks, the examiner further asserts that Hendricks teaches performing fitting procedures which account for errors in the definition of the common subsets, and cites column 44, lines 8-65, and column 45, lines 47-56 of the Hendricks reference in support of this assertion. Applicants respectfully traverse the Examiner's assertions. As described above, fitting procedures can be used to reduce the magnitude of errors and the impact of bias on a mathematical model. Rather than discussing the use of fitting procedures, the portions of the Hendricks reference cited by the Examiner teach a database format and indexing means employed within the Hendricks invention. Hendricks clearly does not teach or suggest performing fitting procedures which account for errors in the definition of the common subsets, as recited in Applicants' Claim 20. Because Applicants have shown that Hendricks does not teach or suggest performing fitting procedures to account for errors in the definition of common subsets, and because the Examiner admits that Eldering does not teach performing such fitting procedures (see Office Action dated March 12, 2003, Page 7, first full paragraph), Applicants assert that at least one element of Applicants' claimed invention is not taught or suggested by the Eldering and Hendricks references. It is well established that, in order to show obviousness, all limitations must be taught or suggested by the prior art. In Re Boyka, 180 U.S.P.Q. 580, 490 F.2d 981 (CCPA 1974); MPEP § 2143.03. It is error to ignore specific limitations distinguishing over the references. In Re Boe, 184 U.S.P.Q. 38, 505 F.2d 1297 (CCPA 1974); In Re Saether, 181 U.S.P.Q. 36, 492 F.2d 849 (CCPA 1974); In Re Glass, 176

U.S.P.Q. 489, 472 F.2d 1388 (CCPA 1973). Applicants assert that Claim 20 is patentable because at least one limitation therein is not taught by the references cited.

In addition to the element-specific analysis outlined above, and assuming, without admitting, that the Eldering and Hendricks references teach that which is asserted by the Examiner, Applicants assert that the Examiner's combination of the Eldering and Hendricks patents is motivated by hindsight, rather than by a teaching or suggestion within the prior art. For example, the Examiner asserts simply that "It would have been obvious to one having ordinary skill in the art at the time the invention was made to define an error function which describes the two datasets in terms of said mathematical assumption; performing fitting procedures to account for errors in the assumed relationship; and performing fitting procedures which account for errors in the definition of the common subsets and to modify in Eldering because such a modification would allow Eldering to analyze the information and to use an algorithm to perform the mathematical assumption of the datasets." Applicants assert that, prior to Applicants' invention of the claimed subject matter, no such motivation existed. As stated by the Court of Appeals for the Federal Circuit, "'Determination of obviousness cannot be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the patented invention.' ATD Corp. v. Lydall, Inc., 159 F.3d 534, 546 (Fed. Cir. 1998). There must be a teaching or suggestion within the prior art, within the nature of the problem to be solved, or within the general knowledge of a person of ordinary skill in the field of the invention, to look to particular sources, to select particular elements, and to combine them as combined by the inventor. See, Ruiz v. A.B. Chance Co., 234 F.3d 654, 665, (Fed. Cir. 2000); ATD Corp., 159 F.3d at 546; Heidelberger Druckmaschinen AG v. Hantscho Commercial Prods., Inc., 21 F.3d 1068, 1072 (Fed. Cir. 1994) ('When the patented invention is made by combining known components to achieve a new system, the prior art must provide a suggestion or motivation to make such a combination.')". Crown Operations Intern., Ltd. v. Solutia Inc., 289 F.3d 1367, 1376 (Fed. Cir. 2002). Applicants therefore assert that the pending claims are patentable over the Eldering and Hendricks references.

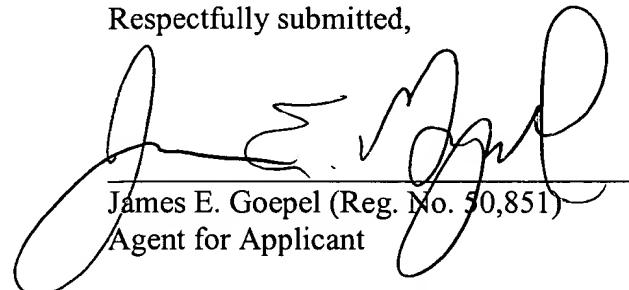
Applicants respectfully traverse the Examiner's remaining rejections as well. Having shown that Claims 20 and 25 are patentable, Applicants assert that the remaining pending claims are patentable for at least the reasons set forth above. The Court of Appeals for the Federal Circuit has consistently held that where a claim is dependent upon a valid independent claim, the independent claim is *a fortiori* valid because it contains all the limitations of the independent

claim plus further limitations. See, e.g., Hartness Intern. Inc. v. Simplimatic Engineering Co., 819 F.2d 1100, 1108 (Fed. Cir. 1987). Applicants reassert the arguments above for each of the remaining pending claims, and respectfully requests that the Examiner remove the rejection of those claims.

C O N C L U S I O N

Having responded to all objections and rejections set forth in the outstanding Office Action, it is submitted that the pending claims are in condition for allowance and Notice to that effect is respectfully solicited. In the event that the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of one or more of the above claims, she is courteously requested to contact Applicants' undersigned representative.

Respectfully submitted,



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